

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Date: July 10, 2001**

In re application of: **Cohn et al.**  
Serial No. **09/399,212**  
Filed: **September 17, 1999**  
For: **GENETIC MARKER FOR**  
**SPONDYLOEPIMETAPHYSEAL DYSPLASIA**

DECLARATION UNDER 37 C.F.R. §1.132 OF DR. DANIEL COHN

1. I, Daniel Cohn, Ph.D., residing at 538 14th St., Santa Monica, CA 90402, hereby declare I have personal knowledge of the facts stated herein.
2. I am the Director of the Skeletal Genetics Laboratory and a Research Scientist in the Medical Genetics Group at Cedars-Sinai Medical Center, located at 8700 Beverly Boulevard in Los Angeles, California 90048. I am also a Professor of Human Genetics and Pediatrics at University of California, Los Angeles School of Medicine.
3. I am a co-inventor, with Muhammad Faiyaz ul Haque, Ph.D., Lily King, M.S., and Deborah Krakow, M.D., of the technology claimed in the U.S. Patent Application Serial Number 09/399,212 ("Ser. No. 09/399,212") filed September 17, 1999 and entitled GENETIC MARKER FOR SPONDYLOEPIMETAPHYSEAL DYSPLASIA.
4. I am also a co-author of an article published in the journal *Nature Genetics* in October 1998 entitled "Mutations in orthologous genes in human spondyloepimetaphyseal dysplasia and

the brachymorphic mouse" (Nat. Genet. 1998 Oct; Vol. 20 (2) 157-162) ("Faiyaz ul Haque *et al.*").

5. The release date of the nucleic acid sequences identified in Ser. No. 09/399,212 as Sequence Identification Numbers 1, 2 and 9 ("SEQ ID NOS: 1, 2 and 9"), were coincident with the publication of *Faiyaz ul Haque et al.* in October of 1998, which is less than one year from the filing date of Ser. No. 09/399,212, September 17, 1999.

6. The nucleic acid sequences disclosed in *Faiyaz ul Haque et al.*, *i.e.*, SEQ ID NOS: 1, 2 and 9, are part of the claimed technology in Ser. No. 09/399,212. Only the named co-inventors, myself, Muhammad Faiyaz ul Haque, Lily King, and Deborah Krakow, participated in the identification of nucleotide sequences claimed in Ser. No. 09/399,212.

7. Named co-inventors of Ser. No. 09/399,212, Muhammad Faiyaz ul Haque, Lily King, and Deborah Krakow, were also co-authors of *Faiyaz ul Haque et al.*

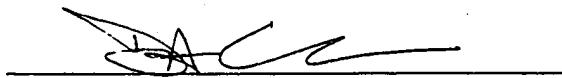
8. The other co-authors listed on the article, *i.e.*, Rita Cantor, Mike Rusiniak, Richard Swank, Andrea Superti-Furga, Sayedul Haque, Hassan Abbas, Wasim Ahmad, and Mahmud Ahmad, were not and are not co-inventors of the claimed invention. I have personal knowledge pertaining specifically to the following:

- (a) Sayedul Haque, Hassan Abbas, Hassan Abbas, and Wasim Ahmad were involved in identifying and clinically studying an affected Pakistani family and collecting blood samples from them. They made no contribution to the conception of any claim of the invention.
- (b) Andrea Superti-Furga studied sulfate activation by PAPSS1 in cultured cells from Pakistani patients. He made no contribution to the conception of any claim of the invention.

(c) Rita Cantor is a mathematical geneticist who performed routine genetic calculations for the study. She made no contribution to the conception of any claim of the invention.

(d) Mike Rusiniak and Richard Swank provided mouse DNA for the study. They made no contribution to the conception of any claim of the invention.

Executed on this 11 day of July, 2001 at Los Angeles, California.



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Daniel Cohn, Ph.D.  
Director of the Skeletal Genetics Laboratory  
Cedars-Sinai Medical Center